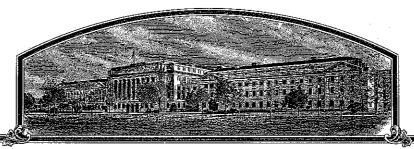
No.



200500170

THIR UNITED STATES OF AMERICA

TO ALL TO WHOM THESE: PRESENTS: SHALL COME;

AASH Research Voundation

THECORS, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY WARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC **REPLEMISHMENT** OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY ${
m LAW}$, THE AUGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR **PORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE** WE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE SE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE ENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321

SOYBEAN

'ProSoy'

In Testimon Whereof, I have hereunto set my hand and caused the seal of the Hunt Unriety Frotection Office to be affixed at the City of Washington, D.C. this fifteenth day of June, in the year two thousand and five.

Plant Variety Protection Office

CAPACITY OR TITLE

3/2/05

(See reverse for instructions and information collection burden statement,

DATE

Dale Zetocha

Executive Director

INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initiated and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvpindex.htm

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 http://www.ams.usda.gov/lsg/seed.htm.

ITEM

- 19a. Give:
- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;
- (3) evidence of uniformity and stability; and
- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
 - (1) identify these varieties and state all differences objectively;
 - (2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
 - (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 20. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- 23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.
- 22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

'ProSoy' was first evaluated under a material transfer agreement in the United States, dated November 15, 2002. Material transfer agreements have been used since as well and are for testing and evaluation purposes only. No seed sales were authorized.

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

'NorPro' issued U.S. PVP Certificate No. 9800326, issued February 5, 2001.

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0881-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Exhibit A

Origin and Breeding History of the Variety ProSoy

ProSoy, tested as ND no., 99-4022, was derived from the cross of 'Norpro' X 'Kato', made in 1996. The F₁ plant was grown in the 1996-1997 Chile winter nursery. The F₂ seed was grown in the summer of 1997 and advanced to the F₃ generation by the single-pod bulk method. The F₃ population was grown in the 1997-1998 Chile winter nursery and advanced to the F₄ generation by the single-pod bulk method. The F₄ population was grown at Casselton, ND in the summer of 1998. F₄ plants from the segregating population were individually threshed in the fall of 1998 and F_{4.5} plant-rows were selected in 1999. ND99-4022 was first tested in replicated yield trials in 2000. ProSoy was selected for high protein, yellow hila, and high yield. Individual F_{4.7} plants were threshed in 2001 and 88 single-plant selections were evaluated for uniformity in the summer of 2002 in Fargo and Prosper, ND. Of these 88 purification rows, 83 were individually harvested and bulked after evaluation of hilum color, plant maturity, flower color, plant height, pubescence color, seed coat luster, and pod color. Breeder seed of ND99-4022 was increased in the summer of 2003. In the summer of 2004 the Foundation seed of ND99-4022 was increased at Casselton, ND. ProSoy was released Jan. 18, 2005 as an F₁₀ generation pure line soybean cultivar. Variants that include up to 0.2% buff hila, 0.2% grey hila, 0.2% brown hila, 0.2% tawny pubescence, 0.2% white flower color and 0.3% tan pods are considered within normal variation for the cultivar ProSoy. ProSoy has been observed to be uniform and stable for a period of three years for the characteristics described within the application.

Exhibit B

Novelty Statement

- 1. ProSoy was developed primarily for high protein, yellow hila, and high yield.
- 2. Kato is the most similar variety to ProSoy. ProSoy has purple flowers, gray pubescence, brown pods, and yellow hila. Kato has purple flowers, tawny pubescence, brown pods and black hila. ProSoy and Kato have similar seed protein and date of physiological maturity, but can be distinguished because ProSoy has gray pubescence and Kato has tawny pubescence.

(= brown) AN April 11,2005 REPRODUCE LOCALLY. Include form number and date on all reproductions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marrial or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille , Jarge print, audiotape, etc.) should contact the USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MD 20705

EXHIBIT C (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY SOYBEAN (Glycine max (L.) Merr.)

NAME OF AP	PLTC A NT/S1			<u>·</u>	
	Research Found	ation			FOR OFFICIAL USE ONLY
ADDRESS (Str	eet and No. or R.F.D. No., City	, State, and ZIP Code)	· · · · · · · · · · · · · · · · · · ·		200500170
· PO Box					Laaaaa aa aa
	ND 58105-501	4	•		VARIETY NAME
_			,		ProSoy
			•		TEMPORARY OR EXPERIMENTAL DESIGNATION
			H_{i}^{N}		ND99-4022
PLEASE RI	EAD ALL INSTRUCTI	ONS CAREFULLY: Place	the appropriate number	that describes the var	ietal character of this variety in the boxes
Place a zero quantitative	in the first box (e.g	9 9 or () 9) when numb	oer is either 99 or less o	or 9 or less respectively. Data for
plant chara	cters should be based or	a a minimum of 100 plants.	Comparative data sho	uld be determined fron	varieties entered in the same trial. Royal
Horticultur	al Society or any recogn	uzed color standard may b	e used to determine plan	t colors; designate syst	em used:
		r variety; lack of response			
A. MORP	HOLOGY		may uctaly progress or yo	or application.	
Seed Shape	· •				
2	1 = Spherical (L/W, L/T, and)	Γ/W ratios < 1.2)	2 = Spheric (L/W ratio	al-Flattened > 1.2; L/T ratio	< 1.2)
	3 = Elongate (L/T ratio > 1.2;	T/W ratio < 1.2)	4 = Elongat (L/T ratio >	te-Flattened > 1.2;T/W ratio >	1.2)
Seed Coat (Color:	•	- ,		÷
1	1 = Yellow	2 = Green	3 = Brown	. 4 = Black	5 = Other (Please Specify)
Seed Coat I	Luster:				
1	1 = Dull	2 = Shiny			
Seed Size:				·	:
1 6	grams/100 sec	eds			
Tiluzz Colo	r:	•	•		
2	1 = Buff 6 = Black	2 = Yellow 7 = Other (Please	3 = Brown Specify)	4 = Gray	5 = Imperfect Black

Cotyledon Color:

1 = Yellow

2 = Green

Seed Protein Peroxidase Activity:

A. MORPHOLOGY (Continued)

1 1

1 = Low

2 = High

Hypocotyl Color:

3

1 = Green

2 = Green with Bronze

('Evans' or 'Davis') Bands below Cotyledons ('Woodworth' or 'Tracy')

as belo

3 = Light Purple below Cotyledons ('Beeson' or 'Pickett 71')

4 = Dark Purple extending to unifoliolate leaves ('Hodgson', 'Coker', or 'Hampton 266A')

Leaflet Shape:

2]

1 = Lanceolate

2 = Oval

3 = Ovate

4 = Other (Please Specify)

Flower Color:

2

1 = White

2 = Purple

3 = White with a Purple Throat

Pod Color:

2

1 = Tan

2 = Brown

3 = Black

Pubescence Color:

 $1 \quad 1 = Gray$

2 = Brown (Tawny)

3 = Light Tawny

Plant Habit:

3

1 = Determinate

2 = Semi - Determinate

3 = Indeterminate

4 = Intermediate

Maturity Group:

0 3

1 = 000 $6 = \mathbf{III}$

 $\begin{array}{ccc}
000 & 2 = 90 \\
\text{III} & 7 = \text{IV}
\end{array}$

3 = 0

4 = I

 $5 = \Pi$

11 = VIII

12 = IX

8 = V 13 = X

9 = VI14 = XI

10 = VII15 = XII

Maturity Subgroup:

8

Please enter a value from 0 - 9

B. DISEASE REACTIONS

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

Bacterial

0

Bacterial Pustule (Xanthomonas campestris pv. glycines (Nakano) Dye)

0

Bacterial Blight (Pseudomonas syringae pv. glycinea (Coerper) Young, Dye, & Wilkie)

0

Wildfire Blight (Pseudomonas syringae pv. tabaci (Wolf & Foster) Young, Dye, & Wilkie)

B. DISEASE REACTIONS (Continued)

0 = Not Tested

1 = Susceptible

Brown Spot (Septoria glycines Hemmi)

Frogeye Leaf Spot (Cercospora sojina Hara)

race 1

race 5

race 2

race 6

race 3

race 4

Other (Please Specify)

Target Spot (Corynespora cassiicola (Berk. & Curt.) Wei)

Downey Mildew (Peronospora trifoliorum var. manchurica (Naum.) Syd. ex Gäum)

Powdery Mildew (Microsphaera diffusa Cke. & Pk.)

Brown Stem Rot (Phialophora gregata (Allington & Chamberlain) W. Gams.)

Stem Canker (Diaporthe phaseolorum (Cke. & Ell.) Sacc. var. caulivora Athow & Caldwell)

Pod and Stem Blight (Diaporthe phaseolorum (Cke. & Ell.) Sacc. var. sojae (Lehman) Wehm.)

Purple Seed Stain (Cercospora kikuchii (T. Matsu. & Tomoyasu) Gardener)

Rhizoctonia Root Rot (Rhizoctonia solani Kühn)

Phytophthora Root Rot (Phytophthora megasperma Drechs. f. sp. glycinea (Kuan & Erwin))

	7		1				
0	race 1	0	race 8	0	race 15	0	
0		0		0	race 15	0	race 22
	race 2		race 9		race 16	-	race 23
1	race 3	0	race 10	0	race 17	0	race 24
0	race 4	0	race 11	0	race 18	0	race 25
0	race 5	0	race 12	0	race 19	0	race 26
0	гасе б	0	race 13	0	race 20	0	Other (Please Specify)
0	race 7	0	race 14	0	race 21		

Bud Blight (Tobacco Ringspot Virus)

Yellow Mosaic (Bean Yellow Mosaic Virus)

pages if necessary.

D. II	NSECT REACTIONS	0 = Not Tested	1 = Suscept	tible 2 = Res	istant 3 = Toler	
0	Mexican Bean Beetle (Epilachna	ı varivestis Mulsant)				44
0	Potato Leaf Hopper (Empoasca	fabae (Harris))		·		
0	Other (Please Specify)		· .			
E. H	ERBICIDE REACTIONS	0 = Not Tested	1 = Suscept	ible 2 = Resi	stant	
0	Metribuzin					
0	Bentazone					
0	Sulfonylurea		. ,			
1	Glyphosate			4.		
0	Glufosinate		:			•
0	Pendimethalin		•			
0	Other (Please Specify)					
F. TR	ANSGENIC COMPOSITION		,			,
If yes,	e development of the subject variet removal of genetic material from please complete the following infor	the application variety	?		ganism other than	7
1. Ple	ase state the vector's name:			,		
2. Ple	ase state the vector components:			:		
3. Ple	ase describe the genetic material s	uccessfully transferred	into the subjec	t variety:		
4. Ple	ase describe the insertion protocol	:		•		
.* A li	iterature citation(s) explaining the "Transgenic Composition" portion	four information requ n of this form.	ests above may	be an acceptable	alternative to con	npletion of
G. BIO	OCHEMICAL MARKERS			<u> </u>		
Please o	lescribe any biochemical informati	on here, which you be	elieve will be hel	pful in further de	scribing the subje	ect variety
(0.5. 00	nple Sequence Repeats, Restriction	n rragment rength k	nymorpnisms, I	sozymie Characte	erization). Use ad	iditional

H. COMMENTS

REPRODUCE LOCALLY. Include form number and edition date on all	reproductions. F	ORM APPROVED - OMB No. 0581-0055				
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held					
EXHIBIT E	confidential until the certificate is issued (7 U.S.C. 2426).					
STATEMENT OF THE BASIS OF OWNERSHIP						
1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME				
NDSU Research Foundation	ND99-4022	'ProSoy'				
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)				
C/O Executive Director	(701) 231-8931	(701) 231-6661				
1735 NDSU Research Park Drive PO Box 5002	7. PVPO NUMBER					
Fargo, ND 58105-5002	200500170					
8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.						
9. Is the applicant (individual or company) a U.S. national or a U.S. b.	ased company? If no, give name of co	ountry. YES NO				
10. Is the applicant the original owner?	NO If no, please answer one	of the following:				
a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)? YES NO If no, give name of country						
b. If the original rights to variety were owned by a company(ies), YES [is (are) the original owner(s) a U.S. bas	* *				
11. Additional explanation on ownership (Trace ownership from origin	aal breeder to current owner. Use the re	everse for extra space if needed):				
See additional Exhibit E Statement on the Basis of the Applicant's ownership included in this application.						
PLEASE NOTE:						
Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:						
 If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species. 						
If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.						
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.						
The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.						
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.						
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).						
To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provide and employer.						

Exhibit E

Dr. Theodore Helms, an employee of the North Dakota Agricultural Experiment Station and North Dakota State University, is the plant breeder who developed 'ProSoy', the soybean cultivar for which Plant Variety Protection is hereby sought. The employee by agreement an because of the conditions of the use of the facilities and funds of the North Dakota Agricultural Experiment Station and North Dakota State University has assigned all ownership rights to 'ProSoy' soybean to the North Dakota Agricultural Experiment Station and North Dakota State University.

North Dakota State University on behalf of the North Dakota Agricultural Experiment Station has assigned ownership to the NDSU Research Foundation. The NDSU Research Foundation is a nonprofit corporation set up to own and manage the intellectual property of North Dakota State University.